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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,320	02/06/2004	Kevin S. Marchitto	D6327CIP	8525

7590 12/27/2011
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EXAMINER

KATAKAM, SUDHAKAR

ART UNIT	PAPER NUMBER
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1621

MAIL DATE	DELIVERY MODE
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12/27/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/774,320	Applicant(s) MARCHITTO ET AL.	
	Examiner Sudhakar Katakam	Art Unit 1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1,5,8,9,12,13,15-17,19,21-23,38 and 39 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1,5,8,9,12,13,15-17,19,21-23,38 and 39 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Clarification

1. *For reasons internal to the USPTO, this application has been reassigned. The present examiner regrets this inconvenience to applicant. A NEW GROUNDS OF REJECTION follows, because applicants' amendments change the scope of the independent claim.*

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,8,9,12,13,15,19,21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by **Fay et al** (Journal of Biological Chemistry, 1989, 264(24), 14005-10).

Fay et al discloses human factor VIII circulates as a series of active heterodimers composed of light chain linked by divalent metal ion to a variable sized heavy chain [see abstract].

The factor VIII in the plasma considered as a composition comprises a factor VIII. Metal is interpreted as energy absorbing susceptor. Applicants' dimer is interpreted as heterodimer. Plasma is interpreted as biomaterial. Absorption of energy by a protein results in protein conformational changes. Protein denatures if the energy is high and again it depends on protein to protein. Therefore, claim 22 is inherent property of a protein.

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4. Claims 1,5,8,9,12,13,15,19,21-23,38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by **Chen** (US 5,679,549).

Chen discloses effect of various lipid mixtures on the expression of factor VIII in the cells. Factor VIII is a heterodimer and consists of a bound divalent metal ion. The culture is interpreted as a composition. It also comprises transferrin, which is homodimer comprises of a metal ion. Even if factor VIII is ignored in the composition, **Chen** disclosure anticipates instant claims based on transferrin.

5. Claims 1,8,9,12,13,15,16,19,21 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by **Nanci et al** (J Biomed Mater Res, 1998, May, 40(2):324-35).

Nanci et al disclose chemical modification of titanium surfaces for covalent attachment of biological molecules [see abstract].

6. **Suggested claim language:** applicants claim language is EXTREMELY broad. Any metalloprotein or biomolecule binds to a metal can anticipate instant claims. Composition does not have any weight in this case. To avoid further delay in the prosecution, applicants are strongly advised to narrow down the claims to their actual claiming invention.

Response to Arguments

7. Applicant's arguments filed on 8 Dec 2011 have been fully considered but they are moot in view of above new grounds of rejection.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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9. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

10. No Claim is allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhakar Katakam whose telephone number is 571-272-9929. The examiner can normally be reached on M-F 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business

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Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sudhakar Katakam/

Primary Examiner, Art Unit 1621